

### AMENDMENTS TO THE CLAIMS

Pursuant to 37 C.F.R. § 1.121 the following listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Previously Presented) A method of calculating echo-canceling (EC) coefficients to be used by an echo cancellation filter in a communication modem, the communication modem having a Fast Fourier Transform (FFT) serial to parallel interface, the method comprising the steps of:

transmitting a first signal including a wide-band cyclic sequence;  
generating an echo signal based on said first signal and a plurality of EC coefficients;  
receiving a second signal including a wide-band cyclic sequence;  
subtracting the echo-cancelled signal from said second signal to produce an echo-cancelled signal;  
transforming the echo-cancelled signal via said FFT serial to parallel interface to produce a transformed echo-cancelled signal;  
calculating said plurality of EC coefficients based on said transformed echo-cancelled signal; and  
providing at least one control signal to control the timing of said transmitting step so that said calculating step is performed for predesignated first signals.









reenabling the step of generating said echo signal with the EC coefficients set to values which yield a unity gain filter;

subtracting the echo-canceled signal from said second signal to produce an echo-cancelled signal;

transforming the echo-cancelled signal via said FFT serial to parallel interface to produce a transformed echo-cancelled signal;

integrating the transformed echo-canceled signal over  $L$  symbols to produce an Echo+EC response measurement;

calculating an EC response,  $EC(k)$ , by determining the difference between the Echo+EC response measurement and the echo response measurement ( $Echo(k)$ ); and

based on the Echo+EC response and the echo response ( $Echo(k)$ ) measurements,  
calculating said EC coefficients; and

providing at least one control signal to control the timing of said transmitting step  
so that said calculating step is performed for predesignated first signals.